## IN THE CLAIMS

- 1. (Currently Amended) An adhesive <u>for adhering a</u>

  pellicle film made of a first fluorine-containing polymer to a

  pellicle frame for supporting the pellicle film, comprising
- a <u>second</u> fluorine-containing polymer and an ultraviolet-curing fluorine-containing monomer, wherein the ultraviolet-curing fluorine-containing monomer is at least one kind of monomer selected from the group consisting of general formulas (1), (2) and (3):

$$C H_2 = C - C O_2 - (C R^2 H)_1 - R f$$
 ...(1)

$$C H_1 = C - C O_2 - (C R^2 H)_m - R f - (C R^3 H)_n - C O_2 - C = C H_2$$
 $I$ 
 $R^4$ 
...(2)

wherein  $R^1$  and  $R^4$  each independently representing hydrogen or a methyl group,  $R^2$  and  $R^3$  each independently representing hydrogen or a hydroxyl group,  $R^4$  is a fluorine-containing group, and  $R^4$  and  $R^4$  each are an integer of 1 to 8, and the

second fluorine-containing polymer is a copolymer comprising
structural units represented by the following formulas (4),
(5), and (6):

$$-C_2F_4- \dots (4)$$

- $-C_3H_6-$  ... (5)
- $-C_2H_2F_2-\ldots(6)$ .
  - 2-3. (Cancelled).

4. (Currently Amended) A pellicle comprising a pellicle film made of a first fluorine-containing polymer and a pellicle frame for supporting the pellicle film, wherein

the pellicle film is adhered to the pellicle frame through an adhesive layer comprising a <u>second</u> fluorine-containing polymer and a substance resulting from curing of an ultraviolet-curing fluorine-containing monomer, wherein the ultraviolet-curing fluorine-containing monomer is at least one kind of monomer selected from the group consisting of general formulas (1), (2) and (3):

$$C H_2 = C - C O_2 - (C R^2 H)_1 - R f \cdots (1)$$

$$R^1$$

$$C H_2 = C - C O_2 - (C R^2 H)_m - R f - (C R^3 H)_n - C O_2 - C = C H_2$$
 $I$ 
 $R^4$ 

...(2)

wherein R<sup>1</sup> and R<sup>4</sup> each independently representing hydrogen or a methyl group, R<sup>2</sup> and R<sup>3</sup> each independently representing hydrogen or a hydroxyl group, Rf is a fluorine-containing group, and 1, m and n each are an integer of 1 to 8, and the second fluorine-containing polymer is a copolymer comprising structural units represented by the following formulas (4), (5), and (6):

- $-C_2F_4-\ldots(4)$
- $-C_3H_6-$  ...(5)
- $-C_2H_2F_2-\ldots(6)$ .
- 5. (Currently Amended) A method for producing a pellicle including a pellicle film made of a first fluorine-containing polymer and a pellicle frame for supporting the pellicle film, comprising a step of

adhering the pellicle film to the pellicle frame through an adhesive comprising a <u>second</u> fluorine-containing polymer and an ultraviolet-curing fluorine-containing monomer, wherein the

ultraviolet-curing fluorine-containing monomer is at least one kind of monomer selected from the group consisting of general formulas (1), (2) and (3):

$$C H_2 = C - C O_2 - (C R^2 H)_1 - R f$$
 ...(1)

 $R^1$ 

$$C H_2 = C - C O_2 - (C R^2 H)_m - R f - (C R^3 H)_n - C O_2 - C = C H_2$$
 $I$ 
 $R^4$ 
...(2)

wherein  $R^1$  and  $R^4$  each independently representing hydrogen or a methyl group,  $R^2$  and  $R^3$  each independently representing hydrogen or a hydroxyl group,  $R^4$  is a fluorine-containing group, and 1, m and n each are an integer of 1 to 8, and the second fluorine-containing polymer is a copolymer comprising structural units represented by the following formulas (4),

(5), and (6):

$$-C_2F_4-$$
 ... (4)

$$-C_3H_6-$$
 ...(5)

$$-C_2H_2F_2-\ldots(6)$$
.

6. (Currently Amended) The adhesive as recited in claim 1, wherein the <a href="second">second</a> fluorine-containing polymer is a copolymer comprising structural units represented by formula (7):

$$-(C_2F_4)_a-(C_3H_6)_b-(C_2H_2F_2)_c-\dots(7)$$

wherein each of a, b and c is a positive integer.

7. (Currently Amended) The pellicle as recited in claim 4, wherein the <u>second</u> fluorine-containing polymer is a copolymer comprising structural units represented by formula (7):

$$-(C_2F_4)_a-(C_3H_6)_b-(C_2H_2F_2)_c-...(7)$$

wherein each of a, b and c is a positive integer.

8. (Currently Amended) The method as recited in claim 5, wherein the <a href="second">second</a> fluorine-containing polymer is a copolymer comprising structural units represented by formula (7):

$$-(C_2F_4)_a - (C_3H_6)_b - (C_2H_2F_2)_c - \dots (7)$$

wherein each of a, b and c is a positive integer.

9. (Currently Amended) The adhesive as recited in claim 1, wherein the ratio between the <u>second</u> fluorine-containing polymer and the ultraviolet-curing fluorine-containing monomer contained in the adhesive is <u>second</u> fluorine-containing polymer:ultraviolet-curing fluorine-containing monomer = 1: 0.25 to 0.5 (weight ratio) in the case of monoacrylate

fluorine-containing monomer represented by general formula (2); and <u>second</u> fluorine-containing polymer:ultraviolet-curing fluorine-containing monomer = 1 : 0.25 to 3 (weight ratio) in the case of diacrylate fluorine-containing monomer represented by general formula (3) or (4).

- 10. (Currently Amended) The pellicle as recited in claim 4, wherein the ratio between the <u>second</u> fluorine-containing polymer and the ultraviolet-curing fluorine-containing monomer contained in the adhesive layer is <u>second</u> fluorine-containing polymer:ultraviolet-curing fluorine-containing monomer = 1: 0.25 to 0.5 (weight ratio) in the case of monoacrylate fluorine-containing monomer represented by general formula (2); and <u>second</u> fluorine-containing polymer:ultraviolet-curing fluorine-containing monomer = 1: 0.25 to 3 (weight ratio) in the case of diacrylate fluorine-containing monomer represented by general formula (3) or (4).
- 11. (Currently Amended) The method as recited in claim 5, ratio between the second fluorine-containing wherein the polymer and the ultraviolet-curing fluorine-containing monomer is fluorine-containing contained in the adhesive second polymer:ultraviolet-curing fluorine-containing monomer = 1 : (weight ratio) in the case of monoacrylate 0.25 to 0.5

fluorine-containing monomer represented by general formula (2); and <a href="mailto:second">second</a> fluorine-containing polymer:ultraviolet-curing fluorine-containing monomer = 1 : 0.25 to 3 (weight ratio) in the case of diacrylate fluorine-containing monomer represented by general formula (3) or (4).

12. (Previously Presented) The adhesive as recited in claim
1, wherein the ultraviolet-curing fluorine-containing monomer
represented by general formula (1) is at least one selected
from the group consisting of:

$$C H_2 = C H - C O_2 - C H_2 - C H - C H_2 (C F_2)_3 C F_3$$

$$I$$

$$O H$$

$$C H_2 = C - C O_2 - C H_2 - C H_2 (C F_2)_7 C F_3$$

$$C H_3$$

$$C H_2 = C - C O_2 - C H_2 - C H_2 (C F_2)_3 C F_3$$

$$C H_3$$

$$CF_{1}$$
 $CH_{2} = C - CO_{2} - CH_{2} - CH - CH_{2}(CF_{2})_{2}$ 
 $I$ 
 $CH_{3}$ 
 $OH$ 
 $CF_{3}$ 

$$C H_2 = C - C O_2 - C H$$

$$C H_3$$

$$C F_3$$

$$C H_2 = C - C O_2 - C H_2 - (C F_2)_3 C F_2 H$$

$$C H_3$$

 $CH_2 = CH - CO_2 - CH_2 - CH_2 - (CF_2)_9 CF_3$ 

$$C F_3$$
 $C H_2 = C H - C O_2 - C H_2 - C H_2 (C F_2)_8 C F$ 
 $C F_3$ 

 $CH_2=CH-CO_2-CH_2(CF_2)_4CH_2OH$ 

$$C H_2 = C H - C O_2 - C H_2 - C F - O (C F_2)_4 C F_3$$

$$| C F_3$$

 $CH_2=CH-CO_2-(CH_2)_6-(CF_2)_5CF_3$ 

$$C H_2 = C H - C O_2 - C H_2 - C F - O - C F_2 - C F - O - (C F_2)_4 C F_3$$

$$I \qquad \qquad I \qquad \qquad C F_3 \qquad \qquad C F_3$$

 $CH_2=CH-CO_2-CH_2-(CF_2)_5CF_2H$ 

 $CH_2=CH-CO_2-(CH_2)_6(CF_2)_3CF_3$  and

OH CF<sub>3</sub>

$$I$$

$$CH_2 = CH - CO_2 - CH_2 - CH - CH_2(CF_2)_8 CF$$

$$CF_3$$

13. (Previously Presented) The pellicle as recited in claim 4, wherein the ultraviolet-curing fluorine-containing monomer represented by general formula (1) is at least one selected from the group consisting of:

$$C H_2 = C H - C O_2 - C H_2 - C H - C H_2 (C F_2)_3 C F_3$$

$$I$$

$$O H$$

$$C H_2 = C - C O_2 - C H_2 - C H_2 (C F_2)_7 C F_3$$

$$I$$

$$C H_3$$

$$C H_2 = C - C O_2 - C H_2 - C H_2 (C F_2)_3 C F_3$$

$$C H_3$$

$$C F_3$$
 $C H_2 = C - C O_2 - C H_2 - C H - C H_2 (C F_2)_2$ 
 $C H_3$ 
 $C H_3$ 
 $C H_3$ 
 $C H_3$ 
 $C H_3$ 
 $C F_3$ 

$$C F_3$$

$$C H_2 = C - C O_2 - C H$$

$$C F_3$$

$$C F_3$$

$$C H_2 = C - C O_2 - C H_2 - (C F_2)_3 C F_2 H$$

$$I$$

$$C H_3$$

$$CH_2 = CH - CO_2 - CH_2 - CH_2 - (CF_2)_9 CF_3$$

$$CF_{3}$$
 $CH_{2}=CH-CO_{2}-CH_{2}-CH_{2}(CF_{2})_{8}CF$ 
 $CF_{3}$ 

 $CH_2=CH-CO_2-CH_2$  ( $CF_2$ )  $_4CH_2OH$ 

$$C H_2 = C H - C O_2 - C H_2 - C F - O (C F_2)_4 C F_3$$

$$C F_3$$

 $CH_2 = CH - CO_2 - (CH_2)_6 - (CF_2)_5 CF_3$ 

 $CH_2=CH-CO_2-CH_2-(CF_2)_5CF_2H$ 

 $CH_2=CH-CO_2-(CH_2)_6(CF_2)_3CF_3$  and

OH CF<sub>3</sub>

$$I$$
 $CH_2 = CH - CO_2 - CH_2 - CH - CH_2(CF_2)_8 CF$ 
 $CF_3$ 

14. (Previously Presented) The method as recited in claim 5, wherein the ultraviolet-curing fluorine-containing monomer represented by general formula (1) is at least one selected from the group consisting of:

$$C H_2 = C H - C O_2 - C H_2 - C H - C H_2 (C F_2)_3 C F_3$$

$$I$$

$$O H$$

$$C H_2 = C - C O_2 - C H_2 - C H_2 (C F_2)_7 C F_3$$
|
 $C H_3$ 

$$C H_2 = C - C O_2 - C H_2 - C H_2 (C F_2)_3 C F_3$$

$$I$$

$$C H_3$$

$$C F_{1}$$
 $C H_{2} = C - C O_{2} - C H_{2} - C H - C H_{2} (C F_{2})_{2}$ 
 $C H_{3}$ 
 $C H_{3}$ 
 $C F_{3}$ 

$$C H_2 = C - C O_2 - C H$$

$$C H_3$$

$$C F_3$$

$$C H_2 = C - C O_2 - C H_2 - (C F_2)_3 C F_2 H$$

$$C H_3$$

 $CH_2=CH-CO_2-CH_2-CH_2-(CF_2)_9CF_3$ 

$$C F_3$$
 $C H_2 = C H - C O_2 - C H_2 - C H_2 (C F_2)_8 C F$ 
 $C F_3$ 

 $CH_2=CH-CO_2-CH_2$  ( $CF_2$ )  $_4CH_2OH$ 

$$C H_2 = C H - C O_2 - C H_2 - C F - O (C F_2)_4 C F_3$$

$$| C F_3$$

$$CH_2 = CH - CO_2 - (CH_2)_6 - (CF_2)_5 CF_3$$

$$C H_2 = C H - C O_2 - C H_2 - C F - O - C F_2 - C F - O - (C F_2)_4 C F_3$$

$$I \qquad \qquad I \qquad \qquad C F_3 \qquad \qquad C F_3$$

 $CH_2=CH-CO_2-CH_2-(CF_2)_5CF_2H$ 

 $CH_2=CH-CO_2-(CH_2)_6(CF_2)_3CF_3$  and

OH CF<sub>3</sub>

$$C H_2 = C H - C O_2 - C H_2 - C H - C H_2 (C F_2)_8 C F$$

$$C F_3$$

15. (Previously Presented) The adhesive as recited in claim
1, wherein the ultraviolet-curing fluorine-containing monomer
represented by general formula (2) is at least one selected
from the group consisting of:

$$CH_2 = CH - CO_2 - CH_2 - (CF_2)_2 - CH_2 - CO_2 - CH = CH_2$$

$$CH_2 = CH - CO_2 - CH_2 - (CF_2)_4 - CH_2 - CO_2 - CH = CH_2$$

$$CH_2 = CH - CO_2 - CH_2 - (CF_2)_6 - CH_2 - CO_2 - CH = CH_2$$

$$CH_2 = CH - CO_2 - CH_2 - (CF_2)_8 - CH_2 - CO_2 - CH = CH_2$$

$$\label{eq:ch2} \mbox{CH}_2 = \mbox{CH} - \mbox{CO}_2 - \mbox{(CH}_2)_n - \mbox{(CF}_2)_4 - \mbox{(CH}_2)_m - \mbox{CO}_2 - \mbox{CH} = \mbox{CH}_2 \\ \mbox{(n and m are respectively 1 to 3)}$$

$$CH_2=C (CH_3)-CO_2-(CH_2)_n-(CF_2)_4-(CH_2)_m-CO_2-CH=CH_2$$
 (n and m are respectively 1 to 3)

$$CH_2=C\left(CH_3\right)-CO_2-\left(CH_2\right)_n-\left(CF_2\right)_4-\left(CH_2\right)_m-CO_2-C\left(CH_3\right)=CH_2$$
 (n and m are respectively 1 to 3) and

$$\label{eq:ch2} \text{CH}_2 = \text{CH} - \text{CO}_2 - \text{CH} \left( \text{OH} \right) - \left( \text{CF}_2 \right)_4 - \left( \text{CH} \right)_n - \text{CO}_2 - \text{CH} = \text{CH}_2$$
 (n is 1 to 3).

16. (Previously Presented) The pellicle as recited in claim
4, wherein the ultraviolet-curing fluorine-containing monomer
represented by general formula (2) is at least one selected
from the group consisting of:

$$CH_2 = CH - CO_2 - CH_2 - (CF_2)_2 - CH_2 - CO_2 - CH = CH_2$$

$$CH_2=CH-CO_2-CH_2-(CF_2)_4-CH_2-CO_2-CH=CH_2$$

$$CH_2 = CH - CO_2 - CH_2 - (CF_2)_6 - CH_2 - CO_2 - CH = CH_2$$

$$CH_2 = CH - CO_2 - CH_2 - (CF_2)_8 - CH_2 - CO_2 - CH = CH_2$$

$$CH_2=C\left(CH_3\right)-CO_2-\left(CH_2\right)_n-\left(CF_2\right)_4-\left(CH_2\right)_m-CO_2-CH=CH_2$$
 (n and m are respectively 1 to 3)

$$CH_2=C\left(CH_3\right)-CO_2-\left(CH_2\right)_n-\left(CF_2\right)_4-\left(CH_2\right)_m-CO_2-C\left(CH_3\right)=CH_2$$
 (n and m are respectively 1 to 3) and

$$CH_2=CH-CO_2-CH(OH)-(CF_2)_4-(CH)_n-CO_2-CH=CH_2$$
(n is 1 to 3).

17. (Previously Presented) The method as recited in claim 5, wherein the ultraviolet-curing fluorine-containing monomer represented by general formula (2) is at least one selected from the group consisting of:

$$CH_2 = CH - CO_2 - CH_2 - (CF_2)_2 - CH_2 - CO_2 - CH = CH_2$$

$$CH_2 = CH - CO_2 - CH_2 - (CF_2)_4 - CH_2 - CO_2 - CH = CH_2$$

$$CH_2 = CH - CO_2 - CH_2 - (CF_2)_6 - CH_2 - CO_2 - CH = CH_2$$

$$CH_2 = CH - CO_2 - CH_2 - (CF_2)_8 - CH_2 - CO_2 - CH = CH_2$$

$$CH_2=CH-CO_2-(CH_2)_n-(CF_2)_4-(CH_2)_m-CO_2-CH=CH_2$$
 (n and m are respectively 1 to 3)

$$CH_2=C(CH_3)-CO_2-(CH_2)_n-(CF_2)_4-(CH_2)_m-CO_2-CH=CH_2$$
 (n and m are respectively 1 to 3)

$$CH_2=C\left(CH_3\right)-CO_2-\left(CH_2\right)_n-\left(CF_2\right)_4-\left(CH_2\right)_m-CO_2-C\left(CH_3\right)=CH_2$$
 (n and m are respectively 1 to 3) and

$$CH_2=CH-CO_2-CH(OH)-(CF_2)_4-(CH)_n-CO_2-CH=CH_2$$
 (n is 1 to 3).

18. (Previously Presented) The adhesive as recited in claim

1, wherein the ultraviolet-curing fluorine-containing monomer
represented by general formula (3) is at least one selected
from the group consisting of:

$$C H_2 = C H - C O_2 - (C H_2) - C H - (C H_2) - (C F_2)_3 C F_3$$

$$I$$

$$O_2 C - C H = C H_2$$

$$C H_2 = C H - C O_2 - (C H_2) - C H - (C H_2) - (C F_2)_5 C F_3$$

$$| O_2 C - C H = C H_2$$

$$C H_2 = C H - C O_2 - (C H_2) - C H - (C H_2) - (C F_2)_7 C F_3$$

$$I$$

$$O_2 C - C H = C H_2$$

$$C H_2 = C H - C O_2 - (C H_2)_n - C H - (C H_2)_m - (C F_2)_1 C F_3$$

$$| O_2 C - C H = C H_2$$
(n and m are respectively 1 to 3)

and

$$C H_2 = C H - C O_2 - (C H_2)_n - C H - (C H_2)_m - (C F_2)_3 C F_3$$

$$| O_2 C - C (C H_3) = C H_2$$
(n and m are respectively 1 to 3)

19. (Previously Presented) The pellicle as recited in claim 5, wherein the ultraviolet-curing fluorine-containing monomer represented by general formula (3) is at least one selected from the group consisting of:

$$C H_2 = C H - C O_2 - (C H_2) - C H - (C H_2) - (C F_2)_3 C F_3$$

$$I$$

$$O_2 C - C H = C H_2$$

$$C H_2 = C H - C O_2 - (C H_2) - C H - (C H_2) - (C F_2)_5 C F_3$$

$$I$$

$$O_2 C - C H = C H_2$$

$$C H_2 = C H - C O_2 - (C H_2) - C H - (C H_2) - (C F_2)_7 C F_3$$

$$I$$

$$O_2 C - C H = C H_2$$

$$C H_2 = C H - C O_2 - (C H_2)_n - C H - (C H_2)_m - (C F_2)_3 C F_3$$

$$| O_2 C - C H = C H_2$$
(n and m are respectively 1 to 3)

and

$$C H_2 = C H - C O_2 - (C H_2)_n - C H - (C H_2)_m - (C F_2)_3 C F_3$$

$$| O_2 C - C (C H_3) = C H_2$$
(n and m are respectively 1 to 3)

20. (Previously Presented) The method as recited in claim 5, wherein the ultraviolet-curing fluorine-containing monomer represented by general formula (3) is at least one selected from the group consisting of:

$$C H_2 = C H - C O_2 - (C H_2) - C H - (C H_2) - (C F_2)_3 C F_3$$

$$I$$

$$O_2 C - C H = C H_2$$

$$C H_2 = C H - C O_2 - (C H_2) - C H - (C H_2) - (C F_2)_5 C F_3$$

$$I$$

$$O_2 C - C H = C H_2$$

$$C H_2 = C H - C O_2 - (C H_2) - C H - (C H_2) - (C F_2)_7 C F_3$$

$$| O_2 C - C H = C H_2$$

$$C H_2 = C H - C O_2 - (C H_2)_n - C H - (C H_2)_m - (C F_2)_3 C F_3$$

$$| O_2 C - C H = C H_2$$
(n and m are respectively 1 to 3)

and

$$C H_2 = C H - C O_2 - (C H_2)_n - C H - (C H_2)_m - (C F_2)_3 C F_3$$

$$| O_2 C - C (C H_3) = C H_2$$
(n and m are respectively 1 to 3)

21. (New) The adhesive as recited in claim 1, wherein said adhesive is suitable for adhering a pellicle film made of said first fluorine-containing polymer to a pellicle frame for supporting the pellicle film.